

Remarks

Applicants include herewith a petition for a one month extension of time and the appropriate fee.

Claim 10 has been amended in accord with the Examiner's comments to remove the outstanding rejection thereto under 35 U.S.C. 112 for lack of antecedent basis.

Claims 1,2,4-10,14-15,18, 20-21,23-32, and 47-51 stand rejected under 35 U.S.C. 102(e) as being anticipated by Gaukel (U.S. Patent Number 6,072,396). Claims 3, 11, 16, 17, 19, 22, 33-36, 38, 40, 41, and 43 stand rejected under 35 U.S.C. 103(a) also over Gaukel.

Claim 1 has been amended to more clearly disclose elements not shown in Gaukel. Gaukel does not disclose a microcontroller which has no port that allows access for reading programming of the microcontroller. One advantage of utilizing a hardware component that does not permit access to the programming is better security. For instance, a prisoner using the Gaukel device has access to and may obtain the program, and may actually revise the programming so that the Gaukel device always indicates the prisoner is in compliance regardless of whether he is or not.

Claim 10 has been amended to specify that Applicants' device is programmed in a low level language closely related to an architecture of the microcontroller. The microcontroller manufacturer cited in the Gaukel patent specification sells a microcontroller programmable in Basic, which is a high level language that may be used in many different processors after compilation. Gaukel does not show use of a microcontroller programmed in a low level language, such as machine or assembly language, which language depends on the architecture

of the microcontroller, as compared to a high level language that may be compiled for use on different machines. With respect to Gaukel, Applicants' use of a low level language provides more security because the low level programming normally requires more expertise than a high level language, such as the high level Basic language which is widely known. For Applicants' purposes, there are other important benefits.

Claim 20 has been amended to specify that the variables monitored and devices actuated by Applicants' device can selectively vary from target to target. Gaukel does not show this. Applicants' system database contains this configuration information. As an example, for installation in one automobile, port number one of the interface may be connected to an air pressure sensor for the tires. The remote database would include this information which defines port one, the type of data from port one, actions to be taken if low, and so forth. In another automobile installation, port number one of the interface may be connected to the air bag sensor. In this case, the remote database would therefore define port one as producing this type of data with the various responses required. Thus, for each automobile, or truck, or transport, the definitions may vary depending on the desired installation with resulting variations being provided as port definitions in the database. The same process applies for controlled features, e.g., door locks on port number one activated from a personal computer. Gaukel does not show this feature whereby the ports may be connected to different sensors in different monitoring devices. In Gaukel, apparently all prisoner devices will apparently use the same sensors. More variation would probably be confusing for the Gaukel system, which already appears somewhat complicated and bulky to be carried around.

While the Examiner states that it is obvious to teach a computer having an Internet

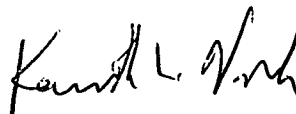
connection, it is respectfully submitted that this is not simply a matter of connecting a computer to the Internet. Even today it is technically difficult to produce a system that provides two-way communication through a wireless network that permits both monitoring and also controlling a device having a wireless transceiver by means of a personal PC connected to the Internet. More specifically, it is respectfully submitted that at the time of the invention, in 1999, it was not contemplated or obvious to those of skill in the art to produce Applicants system which has such features as per claim 20. No references have been submitted that show such a system. On the other hand, the level of skill in the art for 1999 is well documented. For instance, the level of skill in the art in 1999, is plainly shown by Gaukel as well as the extensive listing of cited prior art for this application, none of which discloses anything like Applicants' claimed system having this configuration.

In claims 32 and 51, additional features not shown by Gaukel are specified. The claimed system is further enhanced so that a plurality of client computers connected to the Internet can communicate only with their own targets, but not with other targets. Gaukel shows no means, and no motivation, to perform this function. Gaukel does not even consider the possibility of others gaining access to the Gaukel computers, probably because Gaukel did not consider the possibility of Internet access (see the above comments regarding state of the art in 1999). Only Applicants' system provides that thousands of different clients can log onto the Internet to separately monitor their own devices, but not others. This feature obviously requires a significantly different system than the Gaukel system. Moreover, keeping unauthorized persons from monitoring targets provides greatly improves security, as compared to the Gaukel system.

Claim 46 is amended to claim a computer port for the monitoring device that permits a personal computer to be connected to the monitoring device to permit access to the Internet through the monitoring device wireless system. Gaukel does not show this. Moreover, to provide Gaukel with this type of connection would apparently be disastrous as a prisoner could then connect a personal computer to the Gaukel device and use the personal computer to either reprogram the Gaukel device as discussed above or to override the Gaukel device.

In summary, Applicant submits that the amendments and comments provided above place the application in condition for allowance.

Respectfully submitted,



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By: Kenneth L. Nash

VERSION WITH MARKINGS TO SHOW CHANGES MADE TO THE CLAIMS

1. A monitoring device for monitoring a target, comprising:
a microcontroller programmed for operating said monitoring device, said microcontroller having no port that allows access for reading programming of said microcontroller;
a [pager] wireless transceiver operable for communicating with a [pager] wireless network;
a [pager] modem for interfacing with said [pager] wireless transceiver for communicating over said [pager] wireless network;
a global positioning sensor; and
an interface between said monitoring device and said target for communicating signals relating to said target.

2. The monitoring device of Claim 1, further comprising:
a computer port for connecting said monitoring device to a personal computer having a computer screen and input to allow communication between said personal computer and the Internet over said [pager] wireless network.

3. The monitoring device of Claim 2, further comprising:
said [pager] modem and said microcontroller being operable for sending email messages over said [pager] wireless network.

4. The monitoring device of Claim 1, wherein:
said wireless transceiver comprises a pager [is] operable for sending and receiving signals over said [pager] wireless network.

5. The monitoring device of Claim 1, wherein said interface further comprising:

one or more inputs to said monitoring device from said target, [and]

one or more outputs from said monitoring device to said target[.], said one or more inputs and said one or more outputs being individually selectable from a plurality of inputs to said target and a plurality of outputs from said monitoring device during installation of said monitoring device to said target such that each of said one or more inputs and each of said one or more outputs are identified as to their nature and stored in a database for each of a plurality of monitoring devices.

6. The monitoring device of Claim [1] 5, wherein said target is a vehicle and said interface communicates electrical signals relating to one or more elements of said vehicle.

7. The monitoring device of Claim 1, wherein:

said microcontroller is programmed in a low level language closely related to an architecture of said microcontroller.

8. The monitoring device of Claim 1, wherein:

said microcontroller is programmed to receive a message from said modem and execute one or more commands in response to said message.

[9. The monitoring device of Claim 1, wherein:

said microcontroller has no port that allows access for reading programming of said microcontroller.]

10. A monitoring system for monitoring a target, comprising:
a microcontroller programm[able]ed in a low level language closely related to an architecture of said microcontroller;

a [pager] wireless transceiver for transmitting and receiving [pager] wireless signals;

a [pager] modem for interfacing with said [pager] wireless transceiver;

a target interface between said [monitoring device] microcontroller and said target for communicating one or more target signals relating to said target; and

said microcontroller, said [pager] wireless transceiver, said [pager] modem, and said target interface being affixed to said target.

11. The monitoring system of Claim 10, further comprising:

a [pager] wireless network operable for communication with a plurality of [pager] wireless transceivers, and

one or more computers having an Internet connection, said one or more computers being operable for communicating over said Internet and through said [pager] wireless network to detect said one or more target signals.

12. The monitoring system of Claim 11, wherein:

said one or more computers being operable for sending a target control signal through said Internet connection for controlling a feature of said target.

13. The monitoring system of Claim 10, further comprising:

a [pager] wireless network operable for communication with a plurality of [pager] wireless

transceivers s,

a computer connection operable with said [pager] wireless network, and

a database operable for storing definitions of each of said one or more target signals for a plurality of targets.

14. The monitoring system of Claim 10, further comprising:

a global positioning sensor affixed to said target.

15. The monitoring system of Claim 14, wherein:

said microcontroller is programmed to collect location data from said global positioning sensor, and send said location data through said [pager] modem.

16. The monitoring system of Claim 14, wherein:

a [pager] wireless network operable for communication with a plurality of [pager] wireless transceiver s,

one or more client computers, said one or more client computers being operable for communicating through said [pager] wireless network and said [pager] modem to determine a location of said target.

17. The monitoring system of Claim 10, further comprising:

a [pager] wireless network operable for communication with a plurality of [pager] wireless transceivers,

a server in communication with said [pager] wireless network, and

one or more computers being operable for communicating over said server through said [pager] wireless network to detect said one or more target signals.

18. The monitoring system of Claim 10, further comprising:
a database for storing initialization information defining said one or more target signals for each of a plurality of targets.

19. The monitoring system of Claim 10, further comprising:
a [pager] wireless network operable for communication with a plurality of [pager] wireless transceivers, and
a two-way [pager] wireless transceiver operable for communicating through said [pager] wireless network and with said [pager] modem to send a message to be operated on by said microcontroller.

20. A method for monitoring a plurality of targets, said plurality of targets having at least first and second variables to be monitored and having at least first and second items to be controlled, said first and second variables being selectively different for different of said plurality of targets, said first and second items to be controlled being selectively different for different of said plurality of targets, said method comprising:

attaching a [pager] transceiver with an antenna to each of said plurality of targets;

[attaching an] providing a configurable electrical interface with a plurality of ports [to] for each of said plurality of targets for interfacing between said transceiver and said first and second variables to be monitored and said first and second items to be controlled;

entering definition data into a database to define said first and second variables whereby said definition data selectively varies between said plurality of targets, said definition data comprises a configuration of said plurality of ports which are selectively electrically connected with respect to said first and second variables to be monitored and said first and second items to be controlled, said definition for said configuration of said plurality of ports being selectively variable between said plurality of targets;

[providing that one or more electrical signals may be received from said target through said electrical interface;

providing for encoding of a message to a pager modem to form a modem encoded message relating to said one or more electrical signals from said target;

controlling said electrical interface and said pager modem with a microcontroller; and

providing for transmission of said modem encoded message through said pager using said antenna.]

receiving data through a wireless network from said transceiver, interpreting said received

data based on said definition data in said database;

connecting to said database through an Internet connection with a personal computer to receive said interpreted data; and

sending control information from said personal computer through said Internet connection for transmission through said wireless network for selectively operating said first and second items to be controlled.

21. The method of Claim 20, further comprising:

[repeatedly checking said electrical interface for said one or more electrical signals from said target.] entering definition data into a database to define said first and second items to be controlled whereby said definition data varies between said plurality of targets.

22. The method of Claim 21 [20], further comprising:

transmitting a message from a pager network to said transceiver ,
receiving said message through said modem, and
executing a command responsive to said message.] wherein:

said control information is interpreted by said definition data in said database prior to wireless transmission.

23. The method of Claim 20, further comprising:

determining a global position,
encoding a message to a [pager] modem to form a global position message based on said global position, and

transmitting said global position message through said [pager] transceiver using said antenna.

24. The method of Claim 23, further comprising:

receiving said global position message through a [pager] wireless network, and
saving said global position message in [a] said database.

25. The method of Claim 20, [24,] further comprising:

providing for remote access to said database through said Internet connection by each of a plurality of different subscribers, each said subscriber being able to communicate only with targets for which each respective subscriber is authorized but no for other of said plurality of targets.

26. The method of Claim 25, [further comprising:

providing access to said database over an Internet connection.] wherein:
said definition data includes the meaning of said first and second variables, which meaning selectively varies between said plurality of targets.

27. The method of Claim [20] 21, wherein:

[said target is a vehicle, and said one or more electrical signals relate to said vehicle.]
said definition data includes the meaning of said first and second items to be controlled,
which meaning selectively varies between said plurality of targets.

28. The method of Claim 20, wherein:

said target is a structure affixed to the Earth so as to be non-moveable.

29. The method of Claim 21 [23, further comprising:

affixing a module with said pager, said antenna, and said microcontroller to said target]

wherein:

said plurality of targets [is a] comprise a plurality of vehicles and said first and second variables comprise variables related to vehicles which are selectively different for said plurality of vehicles.

30. The method of Claim 29, further comprising:

remotely operating said module for enforcing a loan related to said vehicle.

31. The method of Claim 29, further comprising:

remotely operating said module for determining that said vehicle stays within a selectable region.

32. A monitoring system for monitoring a plurality of targets on behalf of a plurality of clients, each of said clients being associated with one or more of said plurality of targets, comprising:

a computer network server operable for communicating with a plurality of client computers through an Internet connection;

a database operable for storing information relating to each of said plurality of targets;

a [pager] wireless network system, [operable for communicating wirelessly with a plurality of pagers,] said computer network server being in communication with said [pager] wireless network system; and

a plurality of wireless communication units for [each of] said plurality of targets, each of said plurality of wireless communication units being operable for communication with said wireless network, each of said plurality of wireless communication units including a global position sensor to provide location information for each of said plurality of targets, said computer network server permitting each of said plurality of client computers to selectively communicate only with said one or more of said plurality of targets with which said client is associated such that each of said plurality of client computers [being] is operable for sending a message to request said location information relating to said one or more of said plurality of targets with which said client is associated.

33. The monitoring system of Claim 32, wherein:

[said computer network server is operable for communicating with said plurality of client computers over an Internet connection.] each of said targets has one or more electrically controllable elements controllable by said respective client computers through said computer network server and said wireless network.

34. The monitoring system of Claim 33, further comprising:

said plurality of client computers being operable for producing a map showing thereon a geographic picture of one or more of said plurality of targets.

35. The monitoring system of Claim 33, wherein:

[each of said plurality of client computers being operable for selectively communicating with all or with specific of said one or more of said plurality of targets with which said client is associated.] said plurality of said targets comprise a plurality of automobiles wherein each automobile has one or more variables for monitoring by a respective of said client computers and one or more electrically controllable elements to be controlled by said respective of said client computers.

36. The monitoring system of Claim [32] 35, further comprising:

said database being operable for storing information for each of said plurality of targets that includes definitions of inputs and outputs related to said one or more variables and said one or more electrically controllable elements for a respective interface between each of said plurality of [targets] vehicles for each corresponding wireless communication unit, said definitions of said inputs and outputs being selectively variable from vehicle to vehicle .

37. The monitoring system of Claim 32, wherein:

said database [being operable for containing] comprising a list of ingoing and outgoing messages.

38. The monitoring system of Claim 32, further comprising:
said plurality of wireless communication units including a [pager receiver/transmitter and a pager] modem for encoding said location information.

39. The monitoring system of Claim 32, further comprising:
at least a portion of said plurality of targets being a plurality of transport vessels,
a wireless network system for communicating with said plurality of transport vessels, and
said database being operable for storing vessel location information.

40. The monitoring system of Claim 32, further comprising:
a two-way pager operable for contacting one or more of said plurality of wireless communication units through said [pager] wireless network.

41. The monitoring system of Claim 32, further comprising:
[a target interface for each of said plurality of wireless communication units for communicating electrical signals to said wireless communication unit related to said target.]

a microcontroller for operating said wireless communication unit, said microcontroller having a memory for programming said microcontroller for operating said wireless unit, said microcontroller comprising a computer and said memory within a single integrated circuit.

42. The monitoring system of Claim 41, [further comprising:
a microcontroller for operating said wireless communication unit.] wherein said microcontroller has no port that allows access for reading programming of said memory.

43. The monitoring system of Claim 41, further comprising:

said plurality of client computers are each operable for communicating with said computer network server relating to said electrical signals for said one or more of said plurality of targets with which said client is associated.

44. The monitoring system of Claim 43, further comprising:

at least a portion of said plurality of targets are vehicles,

each vehicle having an electrical system connected to said target interface,

said plurality of client computers being operable for sending an electrical signal to said electrical system of said vehicle through said target interface for said one or more of said plurality of targets with which said client is associated.

45. The monitoring system of Claim 43, further comprising:

at least a portion of said plurality of targets are vehicles,

each vehicle having an electrical system connected to said target interface,

said plurality of client computers being operable for detecting an electrical signal from said vehicle through said target interface, said wireless network system, and said computer network server in accordance with a description for each said target interface stored within said database.

46. A monitoring device for monitoring a target, comprising:

a controller; [microcontroller programmable in a low level language closely related to an architecture of said microcontroller;]

a target interface between said monitoring device and said target for communicating one or more electrical target signals relating to said target;

a memory controllable by said microcontroller for storing data;

a global positioning sensor for producing target location information; [and]

said [microcontroller] controller, said memory, said global positioning sensor, and said target interface being affixed to said target[.];

a transceiver for a wireless network, said wireless network having a connection to the Internet; and

a computer port for connecting said monitoring device to a personal computer having a computer screen and input to allow communication between said personal computer and the Internet over said [pager] wireless network.

47. The monitoring device of Claim 46, [wherein:

said microcontroller is programmable for storing a plurality of records in said memory relating to said target location information] further comprising:

said controller is a microcontroller programmable in a low level language closely related to an architecture of said microcontroller.

48. The monitoring device of Claim 47, further comprising:

a remote computer with an Internet connection for receiving said plurality of records and

producing a map showing a path of movement of said target with respect to a time period.

49. The monitoring device of Claim 48, further comprising:

said remote computer being operable for comparing said path of movement of said target with a second path of movement for a second target.

50. The monitoring device of Claim 46, wherein said transceiver further comprises[ing]:
a pager, and

a pager modem, said [micro]controller being programmable to operate said pager modem for transmitting said location information through said pager.

51. A monitoring system operable for monitoring a plurality of targets on behalf of a plurality of users, each of said users being associated with one or more of said plurality of targets, comprising:

a computer network server operable for communicating with a plurality of client computers;

a database operable for storing information relating to each of said plurality of targets;

a plurality of wireless communication units, a respective of said plurality of wireless communication units associated with said plurality of targets, each of said plurality of wireless communication units including a position sensor to provide location information for each of said plurality of targets;

a wireless network system operable for communicating wirelessly with a plurality of wireless communication units, said computer network server being in communication with said wireless network system, each of said plurality of wireless communication units being operable for communication with said wireless network, each wireless communication unit comprising a transceiver for two-way communication with said wireless network system related to a plurality of control inputs and said plurality of status outputs of said target, each of said plurality of client computers being operable for requesting said computer network server to provide location information relating to said one or more of said plurality of targets with which said client is associated, said computer network server preventing communication with said plurality of targets with which said client is not associated.

52. The monitoring system of Claim 51, wherein:

said computer network server is operable for communicating with said plurality of client computers through [a world-wide computer network] an Internet connection.

53. The monitoring system of Claim 51, further comprising:

said plurality of client computers being operable for producing a map showing thereon a geographic picture of one or more of said plurality of targets.

54. The monitoring system of Claim 51, wherein said plurality [of wireless communication units further comprise:] of targets comprise a plurality of vehicles and said plurality of status outputs relate to a status for each vehicle, said status outputs being selectively different for each vehicle.

[a plurality of inputs for receiving status information related to a respective target.]

55. The monitoring system of Claim 54, wherein said plurality [of wireless communication units further comprise:] of targets comprise a plurality of vehicles and said plurality of control inputs relate to electrically controllable features for each vehicle, said control inputs being selectively different for each vehicle.

[a plurality of outputs for supplying signals to said respective target.]

56. The monitoring system of Claim 55, wherein said plurality of wireless communication units further comprise:

transmitter and receiver electronics for two-way communication with said wireless network system related to said plurality of inputs and said plurality of outputs and said location information.

57. The monitoring system of Claim 56, wherein said plurality of wireless communication units further comprise:

programmable electronics related to said plurality of said control inputs and said plurality of status outputs such that each wireless communication unit is operable for adaptation to selection for each vehicle of said plurality of control inputs and said plurality of status outputs.

58. The monitoring system of Claim [56] 57, wherein:

a plurality of said vehicles comprises a door lock as a control input such that each of said plurality of client computers [being] is operable for selectively controlling said door lock [communicating with all or with specific of said one or more] of said plurality of [targets] vehicles with which said client is associated.

59. The monitoring system of Claim 56, further comprising:

said database being operable for storing information for each of said plurality of targets that includes definitions of control inputs and status outputs for a respective interface between each of said plurality of targets and each corresponding wireless communication unit.

60. The monitoring system of Claim 56, further comprising:

said database being operable for containing a list of ingoing and outgoing messages.

61. The monitoring system of Claim 51, further comprising:

said plurality of wireless communication units including [a receiver/transmitter,] a modem[, and electronics] for encoding said location information[for said modem].

62. The monitoring system of Claim 51, further comprising:

67. The monitoring system of Claim 51, further comprising:
at least a portion of said plurality of targets are vehicles,
each vehicle having an electrical system connected to said target interface,
said plurality of client computers being operable for detecting an electrical signal from said
vehicle through said target interface, said wireless network system, and said computer network server
in accordance with a description for each said target interface stored within said database.

at least a portion of said plurality of targets being a plurality of transport vessels,
said database being operable for storing vessel location information.

63. The monitoring system of Claim [51] 62, further comprising:

a target interface for each of said plurality of wireless communication units for
communicating electrical signals to said wireless communication unit related to said [target] plurality
of transport vehicles.

64. The monitoring system of Claim 63, further comprising:

said plurality of client computers are each operable for communicating with said computer
network server relating to said electrical signals for said one or more of said plurality of [targets]
transport vehicles with which said client is associated.

65. The monitoring system of Claim 51, further comprising:

a microcontroller for operating said wireless communication unit.

66. The monitoring system of Claim 51, further comprising:

at least a portion of said plurality of targets are vehicles,

each vehicle having an electrical system connected to said target interface,

said plurality of client computers being operable for sending an electrical signal to said
electrical system of said vehicle through said target interface for said one or more of said plurality
of targets with which said client is associated.

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1. A monitoring device for monitoring a target, comprising:
a microcontroller programmed for operating said monitoring device, said microcontroller having no port that allows access for reading programming of said microcontroller;
a wireless transceiver operable for communicating with a wireless network;
a modem for interfacing with said [pager] wireless transceiver for communicating over said wireless network;
a global positioning sensor; and
an interface between said monitoring device and said target for communicating signals relating to said target.

2. The monitoring device of Claim 1, further comprising:
a computer port for connecting said monitoring device to a personal computer having a computer screen and input to allow communication between said personal computer and the Internet over said wireless network.

3. The monitoring device of Claim 2, further comprising:
said modem and said microcontroller being operable for sending email messages over said wireless network.

4. The monitoring device of Claim 1, wherein:
said wireless transceiver comprises a pager operable for sending and receiving signals over

said wireless network.

5. The monitoring device of Claim 1, wherein said interface further comprising:

one or more inputs to said monitoring device from said target,

one or more outputs from said monitoring device to said target, said one or more inputs and

said one or more outputs being individually selectable from a plurality of inputs to said target and

a plurality of outputs from said monitoring device during installation of said monitoring device to

said target such that each of said one or more inputs and each of said one or more outputs are

identified as to their nature and stored in a database for each of a plurality of monitoring devices.

6. The monitoring device of Claim 5, wherein said target is a vehicle and said interface communicates electrical signals relating to one or more elements of said vehicle.

7. The monitoring device of Claim 1, wherein:

said microcontroller is programmed in a low level language closely related to an architecture of said microcontroller.

8. The monitoring device of Claim 1, wherein:

said microcontroller is programmed to receive a message from said modem and execute one or more commands in response to said message.

10. A monitoring system for monitoring a target, comprising:
a microcontroller programmed in a low level language closely related to an architecture of said microcontroller;
a wireless transceiver for transmitting and receiving wireless signals;
a modem for interfacing with said wireless transceiver;
a target interface between said microcontroller and said target for communicating one or more target signals relating to said target; and
said microcontroller, said wireless transceiver, said modem, and said target interface being affixed to said target.

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11. The monitoring system of Claim 10, further comprising:
a wireless network operable for communication with a plurality of wireless transceivers, and
one or more computers having an Internet connection, said one or more computers being operable for communicating over said Internet and through said wireless network to detect said one or more target signals.

12. The monitoring system of Claim 11, wherein:
said one or more computers being operable for sending a target control signal through said Internet connection for controlling a feature of said target.

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13. The monitoring system of Claim 10, further comprising:
a wireless network operable for communication with a plurality of wireless transceivers,
a computer connection operable with said wireless network, and

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a database operable for storing definitions of each of said one or more target signals for a plurality of targets.

14. The monitoring system of Claim 10, further comprising:
a global positioning sensor affixed to said target.

15. The monitoring system of Claim 14, wherein:
said microcontroller is programmed to collect location data from said global positioning sensor, and send said location data through said modem.

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16. The monitoring system of Claim 14, wherein:
a wireless network operable for communication with a plurality of wireless transceiver s,
one or more client computers, said one or more client computers being operable for communicating through said wireless network and said modem to determine a location of said target.

17. The monitoring system of Claim 10, further comprising:
a wireless network operable for communication with a plurality of wireless transceivers,
a server in communication with said wireless network, and
one or more computers being operable for communicating over said server through said wireless network to detect said one or more target signals.

18. The monitoring system of Claim 10, further comprising:

a database for storing initialization information defining said one or more target signals for each of a plurality of targets.

19. The monitoring system of Claim 10, further comprising:

a wireless network operable for communication with a plurality of wireless transceivers, and

a two-way wireless transceiver operable for communicating through said wireless network

and with said modem to send a message to be operated on by said microcontroller.

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A method for monitoring a plurality of targets, said plurality of targets having at least first and second variables to be monitored and having at least first and second items to be controlled, said first and second variables being selectively different for different of said plurality of targets, said first and second items to be controlled being selectively different for different of said plurality of targets, said method comprising:

attaching a transceiver with an antenna to each of said plurality of targets;

providing a configurable electrical interface with a plurality of ports for each of said plurality of targets for interfacing between said transceiver and said first and second variables to be monitored and said first and second items to be controlled;

entering definition data into a database to define said first and second variables whereby said definition data selectively varies between said plurality of targets, said definition data comprises a configuration of said plurality of ports which are selectively electrically connected with respect to said first and second variables to be monitored and said first and second items to be controlled, said definition for said configuration of said plurality of ports being selectively variable between said plurality of targets;

receiving data through a wireless network from said transceiver, interpreting said received data based on said definition data in said database;

connecting to said database through an Internet connection with a personal computer to receive said interpreted data; and

sending control information from said personal computer through said Internet connection for transmission through said wireless network for selectively operating said first and second items to be controlled.

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4 21. The method of Claim ~~20~~, further comprising:

entering definition data into a database to define said first and second items to be controlled
whereby said definition data varies between said plurality of targets.

22. The method of Claim 21, further comprising:

transmitting a message from a pager network to said transceiver,
receiving said message through said modem, and
executing a command responsive to said message.] wherein:

said control information is interpreted by said definition data in said database prior to
wireless transmission.

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23. The method of Claim ~~20~~, further comprising:

determining a global position,

encoding a message to a modem to form a global position message based on said global
position, and

transmitting said global position message through said transceiver using said antenna.

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24. The method of Claim ~~23~~, further comprising:

receiving said global position message through a wireless network, and
saving said global position message in said database.

25. The method of Claim 20, further comprising:

providing for remote access to said database through said Internet connection by each of a

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plurality of different subscribers, each said subscriber being able to communicate only with targets
for which each respective subscriber is authorized but no for other of said plurality of targets.

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26. The method of Claim ¹²25, wherein:

said definition data includes the meaning of said first and second variables, which meaning
selectively varies between said plurality of targets.

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27. The method of Claim ⁴21, wherein:

said definition data includes the meaning of said first and second items to be controlled,
which meaning selectively varies between said plurality of targets.

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28. The method of Claim ³20, wherein:

said target is a structure affixed to the Earth so as to be non-moveable.

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29. The method of Claim ⁴21 wherein:

said plurality of targets comprise a plurality of vehicles and said first and second variables
comprise variables related to vehicles which are selectively different for said plurality of vehicles.

30. The method of Claim 29, further comprising:

remotely operating said module for enforcing a loan related to said vehicle.

31. The method of Claim 29, further comprising:

remotely operating said module for determining that said vehicle stays within a selectable

region.

15 32.

A monitoring system for monitoring a plurality of targets on behalf of a plurality of clients, each of said clients being associated with one or more of said plurality of targets, comprising:

a computer network server operable for communicating with a plurality of client computers through an Internet connection;

a database operable for storing information relating to each of said plurality of targets;

87 a wireless network system, said computer network server being in communication with said wireless network system; and

a plurality of wireless communication units for said plurality of targets, each of said plurality of wireless communication units being operable for communication with said wireless network, each of said plurality of wireless communication units including a global position sensor to provide location information for each of said plurality of targets, said computer network server permitting each of said plurality of client computers to selectively communicate only with said one or more of said plurality of targets with which said client is associated such that each of said plurality of client computers is operable for sending a message to request said location information relating to said one or more of said plurality of targets with which said client is associated.

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33. The monitoring system of Claim 32, wherein:

each of said targets has one or more electrically controllable elements controllable by said respective client computers through said computer network server and said wireless network.

34. The monitoring system of Claim 33, further comprising:

said plurality of client computers being operable for producing a map showing thereon a geographic picture of one or more of said plurality of targets.

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35. The monitoring system of Claim ¹⁶33, wherein:

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said plurality of said targets comprise a plurality of automobiles wherein each automobile has one or more variables for monitoring by a respective of said client computers and one or more electrically controllable elements to be controlled by said respective of said client computers.

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36. The monitoring system of Claim ¹⁸35, further comprising:

said database being operable for storing information for each of said plurality of targets that includes definitions of inputs and outputs related to said one or more variables and said one or more electrically controllable elements for a respective interface between each of said plurality of vehicles for each corresponding wireless communication unit, said definitions of said inputs and outputs being selectively variable from vehicle to vehicle .

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37. The monitoring system of Claim ¹⁵32, wherein:

said database comprising a list of ingoing and outgoing messages.

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38. The monitoring system of Claim ¹⁵32, further comprising:

said plurality of wireless communication units including a modem for encoding said location information.

39. The monitoring system of Claim 32, further comprising:

at least a portion of said plurality of targets being a plurality of transport vessels,
a wireless network system for communicating with said plurality of transport vessels, and

said database being operable for storing vessel location information.

²³~~40~~. The monitoring system of Claim ¹⁵~~32~~, further comprising:

a two-way pager operable for contacting one or more of said plurality of wireless communication units through said wireless network.

²⁴~~41~~. The monitoring system of Claim ¹⁵~~32~~, further comprising:

a microcontroller for operating said wireless communication unit, said microcontroller having a memory for programming said microcontroller for operating said wireless unit, said microcontroller comprising a computer and said memory within a single integrated circuit.

²⁵~~42~~. The monitoring system of Claim ²⁴~~41~~, wherein said microcontroller has no port that allows access for reading programming of said memory.

43. The monitoring system of Claim 41, further comprising:

said plurality of client computers are each operable for communicating with said computer network server relating to said electrical signals for said one or more of said plurality of targets with which said client is associated.

44. The monitoring system of Claim 43, further comprising:

at least a portion of said plurality of targets are vehicles,

each vehicle having an electrical system connected to said target interface,

said plurality of client computers being operable for sending an electrical signal to said

electrical system of said vehicle through said target interface for said one or more of said plurality of targets with which said client is associated.

45. The monitoring system of Claim 43, further comprising:
at least a portion of said plurality of targets are vehicles,
each vehicle having an electrical system connected to said target interface,
said plurality of client computers being operable for detecting an electrical signal from said vehicle through said target interface, said wireless network system, and said computer network server in accordance with a description for each said target interface stored within said database.

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46. A monitoring device for monitoring a target, comprising:

- a controller;
- a target interface between said monitoring device and said target for communicating one or more electrical target signals relating to said target;
- a memory controllable by said microcontroller for storing data;
- a global positioning sensor for producing target location information;
- said controller, said memory, said global positioning sensor, and said target interface being affixed to said target;
- a transceiver for a wireless network, said wireless network having a connection to the Internet; and
- a computer port for connecting said monitoring device to a personal computer having a computer screen and input to allow communication between said personal computer and the Internet over said wireless network.

47. The monitoring device of Claim 46, further comprising:

said controller is a microcontroller programmable in a low level language closely related to an architecture of said microcontroller.

48. The monitoring device of Claim 47, further comprising:

a remote computer with an Internet connection for receiving said plurality of records and producing a map showing a path of movement of said target with respect to a time period.

49. The monitoring device of Claim 48, further comprising:

said remote computer being operable for comparing said path of movement of said target with a second path of movement for a second target.

50. The monitoring device of Claim 46, wherein said transceiver further comprises:

a pager, and

a pager modem, said controller being programmable to operate said pager modem for transmitting said location information through said pager.

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51. A monitoring system operable for monitoring a plurality of targets on behalf of a plurality of users, each of said users being associated with one or more of said plurality of targets, comprising:

a computer network server operable for communicating with a plurality of client computers;

a database operable for storing information relating to each of said plurality of targets;

a plurality of wireless communication units, a respective of said plurality of wireless communication units associated with said plurality of targets, each of said plurality of wireless communication units including a position sensor to provide location information for each of said plurality of targets;

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a wireless network system operable for communicating wirelessly with a plurality of wireless communication units, said computer network server being in communication with said wireless network system, each of said plurality of wireless communication units being operable for communication with said wireless network, each wireless communication unit comprising a transceiver for two-way communication with said wireless network system related to a plurality of control inputs and said plurality of status outputs of said target, each of said plurality of client computers being operable for requesting said computer network server to provide location information relating to said one or more of said plurality of targets with which said client is associated, said computer network server preventing communication with said plurality of targets with which said client is not associated.

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52. The monitoring system of Claim 29, wherein:

said computer network server is operable for communicating with said plurality of client computers through an Internet connection.

53. The monitoring system of Claim 51, further comprising:
said plurality of client computers being operable for producing a map showing thereon a geographic picture of one or more of said plurality of targets.

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54. The monitoring system of Claim 51, wherein said plurality of targets comprise a plurality of vehicles and said plurality of status outputs relate to a status for each vehicle, said status outputs being selectively different for each vehicle.

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55. The monitoring system of Claim 54, wherein said plurality of targets comprise a plurality of vehicles and said plurality of control inputs relate to electrically controllable features for each vehicle, said control inputs being selectively different for each vehicle.

56. The monitoring system of Claim 55, wherein said plurality of wireless communication units further comprise:

transmitter and receiver electronics for two-way communication with said wireless network system related to said plurality of inputs and said plurality of outputs and said location information.

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57. The monitoring system of Claim 56, wherein said plurality of wireless communication units further comprise:

programmable electronics related to said plurality of said control inputs and said plurality of status outputs such that each wireless communication unit is operable for adaptation to selection for each vehicle of said plurality of control inputs and said plurality of status outputs.

36 58. The monitoring system of Claim ³⁵ 57, wherein:

a plurality of said vehicles comprises a door lock as a control input such that each of said plurality of client computers is operable for selectively controlling said door lock of said plurality of vehicles with which said client is associated.

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59. The monitoring system of Claim ³⁴ 56, further comprising:

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said database being operable for storing information for each of said plurality of targets that includes definitions of control inputs and status outputs for a respective interface between each of said plurality of targets and each corresponding wireless communication unit.

60. The monitoring system of Claim 56, further comprising:
said database being operable for containing a list of ingoing and outgoing messages.

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61. The monitoring system of Claim ²⁹ 51, further comprising:

said plurality of wireless communication units including a modem for encoding said location information.

62. The monitoring system of Claim 51, further comprising:
at least a portion of said plurality of targets being a plurality of transport vessels,
said database being operable for storing vessel location information.

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63. The monitoring system of Claim ⁴⁰ 62, further comprising:

a target interface for each of said plurality of wireless communication units for communicating electrical signals to said wireless communication unit related to said plurality of transport vehicles.

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The monitoring system of Claim 63, further comprising:

said plurality of client computers are each operable for communicating with said computer network server relating to said electrical signals for said one or more of said plurality of transport vehicles with which said client is associated.

65. The monitoring system of Claim 51, further comprising:

a microcontroller for operating said wireless communication unit.

66. The monitoring system of Claim 51, further comprising:

at least a portion of said plurality of targets are vehicles,

each vehicle having an electrical system connected to said target interface,

said plurality of client computers being operable for sending an electrical signal to said electrical system of said vehicle through said target interface for said one or more of said plurality of targets with which said client is associated.

67. The monitoring system of Claim 51, further comprising:

at least a portion of said plurality of targets are vehicles,

each vehicle having an electrical system connected to said target interface,

said plurality of client computers being operable for detecting an electrical signal from said

vehicle through said target interface, said wireless network system, and said computer network server in accordance with a description for each said target interface stored within said database.